



Illinois Department of Transportation

Memorandum

To: DEPUTY SECRETARIES, DIRECTORS AND BUREAU CHIEFS
From: Becky Koehler
Bureau Chief of Personnel Management
Subject: Technical Vacancy
Date: February 20, 2018

Attached are the Position Summary Sheet and Position Description for the vacant technical position listed below. Please post this vacancy announcement February 21, 2018 in the designated areas.

The deadline for applicants to submit their applications for consideration is **4:30 p.m. on Tuesday, March 6, 2018**. Applications will not be accepted after that time and date.

NOTE: A copy of each applicant's ACTIVE Illinois Professional Engineer License must accompany application for this position. Please be advised that if a high volume of applications are received, the applications may be screened to establish a smaller pool of applicants for interview. The screening will be based on the information contained in the application.

If you have any questions, please contact the Bureau of Personnel Management at 217/782-5594.

CE VI

Hydraulics Section Chief
Region 1/District 1/Programming
Highways Project Implementation
Schaumburg

Attachments
42674

Technical Applications [PM1080 rev 6/1/17](#) ****must be received** by the Bureau of Personnel Management, Room 113, 2300 South Dirksen Parkway, Springfield, IL 62764 (Fax# 217/557-3134) or emailed to DOT.CO.BPM.EmploymentApplications@Illinois.gov by **Tuesday, March 6, 2018**, 4:30 p.m. Please include address, daytime phone and position for which applying if not already listed on application. Applicants will be notified in writing to schedule interviews.

NOTE: A copy of each applicant's ACTIVE Illinois Professional Engineer License must accompany application for this position. Please be advised that if a high volume of applications are received, the applications may be screened to establish a smaller pool of applicants for interview. The screening will be based on the information contained in the application.



**Illinois Department
of Transportation**

An Equal Opportunity Employer

Position Summary Sheet

Classification: Civil Engineer VI

Salary: \$6,945 - \$8,983*

Position Title: Hydraulics Section Chief

Union Position: ☒ Yes ☐ No

Position Number: PW116-23-51-805-00-01

IPR#: 42674

Office/Central Bureau/District/Work Address:

Office of Highways Project Implementation/Region One/District One/Bureau of Programming/201 W. Center Ct., Schaumburg, IL

Description of Duties:

This position is accountable for the direction and coordination of the Hydraulics Section which is responsible for the review, development, implementation, and reconciliation of highway drainage concepts and hydraulic designs to improve highway safety and operational effectiveness while minimizing adverse environmental impacts to adjacent areas.

Special Qualifications:

Required:

- Current Illinois Professional Engineer license
- Valid driver's license
- Occasional district-wide travel and overtime

Desired:

- Ten years of experience in the practice of civil engineering of which at least six years should be in the specific area of hydraulic engineering, four years of which should include the planning and supervision of significant engineering work
- Strong oral and written communication skills
- Ability to plan and effectively direct staff for the efficient accomplishment of program objectives

Shift/Remarks:

8:00 am - 4:15 pm / Monday - Friday (45-minute lunch)

THIS POSITION IS COVERED UNDER THE REVOLVING DOOR PROHIBITION (RDP) POLICY.

*Individual salary offers are computed based on an applicant's current position and experience level in comparison to the posted title as well as internal equity of staff in the organizational unit.

**Technical Application PM1080 (revised 6/1/17) is required. No previous version of the PM1080 will be accepted.

**ILLINOIS DEPARTMENT OF TRANSPORTATION
POSITION DESCRIPTION**

DATE:	January 8, 2018	POSITION:	Hydraulics Section Chief
APPROVED BY:	John Baczek	OFFICE:	OHPI/District One/Bureau of Programming
CODE:	PW116-23-51-805-00-01	REPORTS TO:	Bureau Chief of Programming

Position Purpose

This position is accountable for the direction and coordination of the Hydraulics Section which is responsible for the review, development, implementation, and reconciliation of highway drainage concepts and hydraulic designs to improve highway safety and operational effectiveness while minimizing adverse environmental impacts to adjacent areas.

Dimensions

Staff:	Direct 5, Indirect 12-18
Annual Contract Value of Projects Completed:	\$200M - \$900M
Annual Amount of Drainage Consultant Fees:	\$1.5M - \$6M

Nature and Scope

This position reports to the Bureau Chief of Programming. Reporting to this position are the Drainage Studies Manager, Hydraulics and Hydrology Engineer, Drainage Assessment Unit Head, and an Office Coordinator.

This position functions in a geographic area characterized by numerous flood plains and manmade drainage systems which are overtaxed by intensive land development and changing land use. There are over 250 local governments and drainage districts with a complex and conflicting array of land use, drainage ordinances, and rules and regulations which must be understood and carefully evaluated. These include special rules adopted by the Illinois Department of Natural Resources' (IDNR) Office of Water Resources regulating construction in floodways which are delegated to District One to administer. There also exists large tracts of natural wetlands which cannot be impaired, and highly varied and unfavorable soil conditions with extreme sensitivity to any alteration of drainage patterns that could result from either highway or development projects. These factors complicate the process of developing solutions that are acceptable and cost-effective. Due to these conditions, frequent conflict occurs over possible drainage solutions, resulting in this position functioning in frequent adversarial situations.

Typical problems encountered include developing and maintaining effective relationships with various federal, state, and local agencies with drainage jurisdictions to mitigate the adverse drainage impact of existing and proposed land use; anticipating potential highway drainage problems; developing coordinated cost-effective solutions; and based on existing laws, rules and regulations, determining district and other agency responsibilities for proposed drainage actions. The greatest challenge is the management of personnel and project work flow to ensure that projects are completed in a timely manner to meet District One's construction program schedule and ensure compliance with current drainage policies and procedures which reflect current legal requirements, environmental and social concerns, and monetary constraints.

The position personally represents District One with local government sanitary and drainage organizations to develop cooperative solutions to drainage problems that will minimize adverse impacts and flooding on the state right-of-way and adjacent properties, and to ensure prompt implementation of highway drainage projects. The incumbent resolves disputes and conflicts with other district organizations, the IDNR's Office of Water Resources,

the US Army Corps of Engineers, the U.S. Geological Survey, the U.S. Department of Agriculture Natural Resources Services, the Illinois State Water Survey, the Federal Emergency Management Agency, local agencies, and consultants who have an interest in drainage problems and negotiating workable solutions. S/He directs the storm water planning and developing process for proposed improvement projects from the standpoint of their impacts and ensures that drainage solutions are cost-effective, reflect applicable policies and protect departmental interests. The incumbent provides solutions for the most difficult technical and procedural problems, may be certified to serve as back-up to approve certain types of hydraulic reports, provides input prior to finalization of the pavement flooding prioritization list, and ensures that approval is received on various reports and studies prepared by Hydraulics Section staff and departmental consultants. The incumbent determines the need for consultants, approves selection of projects to be done by consultants, makes recommendations regarding selection of consultants for specific projects, chairs consultant negotiation meetings, arbitrates contractual problems, and authorizes work to proceed. S/He distributes work among staff, provides staff development and training opportunities such as on-the-job instruction and appropriate formal training, counsels and motivates staff, evaluates performance, and recommends disciplinary action.

Accountabilities are accomplished through the following:

- Drainage Studies Manager (1) – is, with a staff, accountable for supervising and coordinating activities involved in the preparation and review of drainage studies and plans, hydraulic reports for bridges, multi-box culverts, three sided culverts and pump stations for improvement projects; and for the timely acceptance, engineering feasibility, and cost effectiveness of drainage studies and hydraulic reports.
- Hydraulics and Hydrology Engineer (2) – is, with a staff, accountable for supervising, developing, reviewing and coordinating the preparation of hydraulic reports for bridges, three-sided culverts, multi-box culverts, and pump stations; evaluating highway improvements for effects relative to floodways and floodplains; and conducting scour evaluations at bridges.
- Drainage Assessment Unit Head (1) – is, with a staff, responsible for coordinating activities involved in conducting drainage investigations; preparing drainage plans; reviewing drainage plans prepared by local agencies and private developers; and responding to various district initiatives, such as maintenance and construction site reviews, to minimize the drainage impact of commercial and residential developments, as well as local agency project proposals, and to protect the state investment in the highway right-of-way.
- Office Coordinator (1) – is responsible for providing computing, stenographic, clerical, and filing assistance.

The incumbent works in accordance with accepted principles of drainage engineering but is required to use considerable independent judgement in administering procedures to develop solutions to drainage problems complicated by the existence of numerous floodplains and localized flooding problems with high potential for flood damage. S/He is the principal advisor to district management on matters relating to highway drainage related storm water management issues and to ensure compliance with the floodway rules, which includes recommending to the Region One Engineer the signing of certification statements and issuance of floodway and statewide permits. This position is constrained by applicable departmental/state/federal guidelines and policies.

The incumbent develops and maintains effective relationships with local agency, central office and federal personnel in developing coordinated solutions to drainage problems, developing measures to prevent drainage problems from occurring, obtaining project approval and acceptance. S/He represents District One in obtaining local approval on complex state highway drainage issues, serves on the district Interdisciplinary Scour Evaluation Team to set priorities for structures on the multi-year program, and represents District One on the State of Illinois Drainage Manual Task Force Committee. Occasional district-wide travel and overtime may be necessary.

The effectiveness of this position is measured by the incumbent's ability to provide technical and managerial direction to the Hydraulics Section, to respond promptly and effectively to drainage problems, meet project deadlines, and obtain acceptance of drainage plans by the public, local agencies and the central office.

Principal Accountabilities

1. Communicates effectively with federal, other states, and local agencies to develop acceptable and operationally effective solutions for frequently complex drainage problems for which agreements are difficult to obtain.
2. Develops drainage-related procedures to enable District One to formulate and meet construction program objectives.
3. Ensures the development of procedures for effective development of District One drainage proposals and for the determination of drainage responsibility between the Office of Highways Project Implementation, other agencies and/or developers.
4. Provides for effective management of the section and the efficient distribution of work between in-house staff and consultants to ensure timely project completion.
5. Provides for staff development through continuous performance evaluation and counseling and making available proper training.
6. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.
7. Performs other duties as assigned.